

Patent Claims

1. Electrically heatable insole comprising at least
at one sole basic body and a cover layer, at
5 least one heating electrode, at least one re-
chargeable battery which is electrically con-
nected to the heating electrode and also a con-
trol circuit for controlling the heating process
and for recharging the battery, wherein heating
10 electrode, rechargeable battery and control cir-
cuit are disposed in the sole basic body and/or
between sole basic body and cover layer,
characterised in that
the control circuit (6, 8) has a remote control
15 device for switching the heating process on and
off and a protective circuit for disconnecting
the rechargeable battery in the event of a de-
fect.
- 20 2. Insole according to claim 1, **characterised in
that** the at least one rechargeable battery (4,
5) is a lithium accumulator.
3. Insole according to one of the claims 1 to 2,
25 **characterised in that** the rechargeable battery
or the rechargeable batteries is/are disposed in
the heel region and/or in the foot arch region
of the insole.
- 30 4. Insole according to one of the claims 1 to 3,
characterised in that the heating electrode has
Minimelf resistors.
5. Insole according to one of the claims 1 to 4,
35 **characterised in that** the control circuit is a

control circuit for continuous regulation of the strength of the heating process

- 5 6. Insole according to claim 1 to 5, **characterised in that** the remote control device (8) has an external operating part (10) and an incorporated control part.
- 10 7. Insole according to one of the claims 1 to 6, **characterised in that** the remote control device has a contact-free switch.
- 15 8. Insole according to one of the claims 1 to 7, **characterised in that** the remote control device has a transmitting and receiving unit for wireless transmission of information.
- 20 9. Insole according to one of the claims 5 to 8, **characterised in that** the operating part (10) has display elements (11) for functional display and/or temperature display.
- 25 10. Insole according to one of the claims 5 to 9, **characterised in that** the operating part (10) has a transmitter and an actuation element (12) for activating the transmitter which, in the activated state, transmits a wireless switch-on signal to the incorporated control part.
- 30 11. Insole according to one of the claims 8 to 10, **characterised in that** the operating part (10) has a receiver and in that the remote control device is a bi-directional remote control.
- 35 12. Insole according to one of the claims 5 to 11, **characterised in that** the operating part (10)

has a first switching element of a contact-free switch which cooperates with a second switching element disposed in the incorporated control part.

5

13. Insole according to one of the claims 5 to 12, **characterised in that** the contact-free switch is configured as a reed switch, magnetic switch, proximity switch or the like.

10

14. Insole according to one of the claims 5 to 13, **characterised in that** a plug contact connected to the control circuit (6, 8) for connection of a network device is incorporated in the sole basic body (2).

15